

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-19. (canceled)

20. (new) An apparatus for configuring a local area network in a building for the transport of Ethernet-based data signals and analog signals across a wiring using frequency domain multiplexed analog and data signals, wherein the wiring includes at least first and second wiring segments each comprising at least two conductors, the apparatus comprising:

first and second ports each connected to a respective one of said first and second wiring segments;

first and second data filters each coupled to a respective one of said first and second ports, each having a data signal port operative to pass only data signals;

first and second modems each coupled to said data signal port of a respective one of said first and second filters, operative for bi-directional Ethernet data signal communication with a respective one of said first and second wiring segments;

at least one data connector operative for establishing a data signal connection with a data unit;

a multiport unit coupling said first and second modems to said at least one data connector for data transfer between said modems and said at least one data connector, said multiport unit being constituted by one of: a repeater; a bridge; and router;

first and second analog filters each coupled to a respective one of said first and second ports, each having a respective

analog signal port, and each operative to pass only analog signals;

at least one analog connector operative for establishing an analog signal connection with an analog unit, the at least one analog connector being coupled to said analog signal port of at least one of said analog filters.

21. (new) The apparatus according to claim 20, wherein the analog signals are analog telephone signals, and the analog unit is a telephone set.

22. (new) The apparatus according to claim 20, wherein at least one of the wiring segments is a telephone wiring.

23. (new) The apparatus according to claim 20, wherein the apparatus is at least partially housed within an outlet.

24. (new) The apparatus according to claim 20, further comprising at least one power consuming component connected to at least one of the wiring segments and powered by a power signal carried by the at least one of the wiring segments.

25. (new) The apparatus according to claim 25, wherein the power signal is carried in a frequency spectrum distinct from the analog and data signals.

26. (new) The outlet according to claim 21, wherein the power signal is an alternating current signal.

27. (new) The apparatus according to claim 20, wherein:

the data signals carried over at least one of the wiring segments include a plurality of time division multiplexed data channels;

said apparatus further comprises a plurality of data connectors each operative for establishing a data signal connection with a data unit;

said data connectors are each coupled to the multiport unit; and

said apparatus is operative for coupling each data unit to a distinct data channel.

28. (new) The apparatus according to claim 20, wherein:

the data signals carried over at least one of the wiring segments include a plurality of frequency division multiplexed data channels;

said apparatus further comprises a plurality of data connectors each operative for establishing a data signal connection with a data unit;

said data connectors are each coupled to the multiport unit; and

said apparatus is operative for coupling each data unit to a distinct data channel.

29. (new) The apparatus according to claim 20, wherein said apparatus is attachable to a wall of a building.

30. (new) The apparatus according to claim 20, wherein said analog signal ports of said first and second analog filters are coupled to one another.

31. (new) A network for transporting data and analog signals, said network comprising:

first, second and third nodes; and

first and second wiring segments in a building, each comprising at least two conductors for simultaneously carrying frequency domain multiplexed data and analog signals, wherein:

said first wiring segment connects said first and second nodes together to form, with said first and second nodes, a first Ethernet bi-directional communication link;

said second wiring segment connects said first and third nodes together to form, with said first and third nodes, a second Ethernet bi-directional communication link;

each of said nodes is connectable to at least one data unit for coupling the connected data unit to at least one of said communication links;

each of said nodes is connectable to at least one analog unit for coupling the analog unit to the analog signals carried over at least one of said wiring segments;

said first node contains a coupling unit coupling said first and second communication links together; and

said coupling unit is one of: a repeater; a bridge; and a router.

32. (new) The network according to claim 31, wherein at least one of said nodes is at least in part included in an outlet.

33. (new) the network according to claim 31, wherein at least one of said nodes is included in a telephone outlet.

34. (new) The network according to claim 31, wherein at least one of said wiring segments is constituted by wiring previously installed in the building.

35. (new) The network according to claim 31, wherein at least one of the wiring segments is constituted by telephone wiring.

36. (new) The network according to claim 31, wherein at least one of the analog signals is a telephone signal and at least one of the analog units is a telephone unit.

37. (new) The network according to claim 31, wherein at least one of the nodes comprises a power consuming component connected to at least one of said wiring segments and powered by a power signal carried by said at least one of the wiring segments.

38. (new) The network according to claim 37, wherein the power signal is carried in a frequency spectrum distinct from the analog and data signals.

39. (new) The network according to claim 37, wherein the power signal is an alternating current signal.

40. (new) The network according to claim 31, wherein:

the data signals carried over at least one of said wiring segments include a plurality of time division multiplexed data channels;

one of said nodes connected to said at least one of said wiring segments further comprises a plurality of data connectors each operative for establishing a data signal connection with a data unit;

said data connectors are each coupled to said coupling unit; and

said one of said nodes connected to said at least one of said wiring segments is operative for coupling each data unit to a distinct data channel.

41. (new) The network according to claim 31, wherein:

the data signals carried over at least one of said wiring segments include a plurality of frequency division multiplexed data channels;

one of said nodes connected to said at least one of said wiring segments further comprises a plurality of data connectors each operative for establishing a data signal connection with a data unit;

said data connectors are each coupled to said coupling unit; and

said one of said nodes connected to said at least one of said wiring segments is operative for coupling each data unit to a distinct data channel.

42. (new) The network according to claim 31, wherein at least one of said nodes is connected to an analog unit located external to the building.

43. (new) The network according to claim 31, wherein at least one of said nodes is connected to a data unit located external to the building.

44. (new) A network for transporting data and telephone signals, said network comprising:

first, second and third nodes; and

first and second wiring segments in a building, each comprising at least two conductors for carrying data signals; wherein:

said first wiring segment connects said first and second nodes together to form, with said first and second nodes, a first Ethernet bi-directional communication link;

said second wiring segment connects said first and third nodes together to form, with said first and third nodes, a second Ethernet bi-directional communication link;

said first node contains a coupling unit coupling said first and second communication links together;

said coupling unit is one of: a repeater; a bridge; and a router;

each of said nodes is connectable to at least one data unit for coupling the connected data unit to at least one of said communication links;

at least one of said nodes is coupled to a remote data unit external to the building;

at least one of said nodes is coupled to a remote telephone service unit external to the building; and

said network further transports at least one telephone signal between the remote telephone service unit and at least one telephone device coupled to at least one of said nodes.

45. (new) The network according to claim 44, wherein at least one of said nodes is at least in part included in an outlet.

46. (new) the network according to claim 44, wherein at least one of said nodes is included in a telephone outlet.

47. (new) The network according to claim 44, wherein at least one of the wiring segments is constituted by wiring previously installed in the building.

48. (new) The network according to claim 44, wherein at least one of said wiring segments is constituted by telephone wiring.

49. (new) The network according to claim 44, wherein the telephone signals are digitized telephone signals.

50. (new) The network according to claim 44, wherein at least one of the nodes comprises a power consuming component connected to at least one of said wiring segments and powered by a power signal carried by said at least one of said wiring segments.

51. (new) The network according to claim 50, wherein the power signal is carried in a frequency spectrum distinct from the data and telephone signals.

52. (new) The network according to claim 50, wherein the power signal is an alternating current signal.

53. (new) The network according to claim 44, wherein:

the data signals carried over at least one of said wiring segments includes a plurality of time division multiplexed data channels;

one of said nodes connected to said at least one of said wiring segments further comprises a plurality of data

connectors each operative for establishing a data signal connection with a data unit;

said data connectors are each coupled to said coupling unit; and

said one of said nodes connected to said at least one of said wiring segments is operative for coupling each data unit to a distinct data channel.

54. (new) The network according to claim 44,

the data signals carried over at least one of said wiring segments include a plurality of frequency division multiplexed data channels;

one of said nodes connected to said at least one of said wiring segments further comprises a plurality of data connectors each operative for establishing a data signal connection with a data unit;

said data connectors are each coupled to said coupling unit; and

said one of said nodes connected to said at least one of said wiring segments is operative for coupling each data unit to a distinct data channel.